exchange and vertical features, a separate system for Centrex and ISDN, and a third separate system for private line and special access services [Wood at 119]; and (ii) PacBell has had myriad "different releases [of its data interface systems] that have come out since mid-year 1996" [Wood at 32], which as discussed in connection with Ameritech [Wisconsin Order at 20] creates serious problems for CLECs who have to try to keep up with such changes.

v. *Conclusions*

Despite continuous efforts by LCI, CompTel, AT&T, MCI and Sprint, these and other PacBell failures remain unresolved; indeed, for the most part PacBell has failed meaningfully to address the problems. [McCain Letter; 4/3/97 LCI Letter] And, while an EDI interface to PacBell's OSS might go a long way to resolving many of these failures, PacBell has stated that the earliest an EDI interface will be available is the third quarter of 1997, and that interface would cover *only* ordering. [McCain Letter; 4/24/97 PacBell Letter] It recently was determined that once the EDI interface was up and running, PacBell has no plans to interface this system to its internal systems.

Finally, but tellingly, a PacBell senior vice-president, in sworn testimony, explained his view of the parity requirement of the Commission's Order as follows: "I am referring to the FCC order that says that we need to provide service equal in quality to that which we provide to others. That's what I'm referring to [by the term parity]." "The orders coming in through the LISC, at that time, we needed to ensure that we're giving equal treatment to all of those orders, first come, first served basis, and moving them through the process." [Sinn at 36-38] Of course, that is not what "parity" means under the Order -- it means that PacBell must provide the same access to the CLEC as it does to itself. [See Order ¶¶ 316, 518, 523 and Section A(6) above]

c. NYNEX's Failures

i. Lack of an Electronic Interface

To interface with NYNEX's OSS, LCI uses what NYNEX refers to as its Web-Based Graphical User Interface (WEB/GUI). NYNEX's "WEB/GUI" is not a complete electronic interface, and it limits in significant ways LCI's ability to access and efficiently manipulate important information in the OSS." [Wajsgras at 3] Illustratively: (i) as of April, "LCI [could not] currently obtain electronic access through the WEB/GUI interface to individual CSR records that are longer than 50 pages," and to which "LCI needs access to ... determine, among other things, the type of service and number of lines serving the customer to whom LCI is attempting to sell service" [Wajsgras at 3], (ii) "only one user can access a customer's records at a time," which "impairs LCI's quality control" because supervisory monitoring is not possible and prevents timely response to customers' inquiries regarding their accounts when their records are open at another terminal, and again presents limitations not faced by NYNEX [Wajsgras at 4]; and (iii) "LCI cannot access information about the status of installation orders," which is significant because ... NYNEX has frequently missed due dates for provisioning service" [Wajsgras at 4].

"NYNEX has also not provided LCI with parity in terms of the time it takes LCI to obtain a response from the OSS." [Wajsgras at 5 (explaining that the response time to LCI exceeds one minute or more, while NYNEX's own response time is almost instantaneous, and that the service order handling response time can take a day or longer to LCI while for NYNEX it is far quicker if not instantaneous)] Further, "[o]n at least 32% of the orders that LCI has initiated between February 1, 1997 and March 18, 1997, the due date that was given by NYNEX to LCI's customers has *not* been met," which is "particularly damaging to LCI's ability to compete

effectively as a new entrant" because of the resulting customer dissatisfaction. [Wajsgras at 5 and Ex. A] Also, NYNEX "has persistently failed to provide LCI with call record information on a timely basis," such that "on over 40% of the calls made by LCI customers, NYNEX does not transmit the call record data until three days or more after the call was made." [Wajsgras at 6-7 (explaining further the serious harm this causes LCI through billing delays, decreased and delayed cash flow, and lost revenues)]

LCI has been trying to rectify the OSS-related problems with NYNEX for several months, but has met with no success. [3/24/97 LCI Letter; Wajsgras at 8] Most recently, LCI advised NYNEX that "[t]wo of these issues -- delays in provisioning and usage transmission -- are particularly troublesome in that they are clearly preventing LCI from maintaining service parity with NYNEX." [3/24/97 LCI Letter] As to delayed billing: "LCI is not receiving call detail within an acceptable timeframe" and even according to NYNEX's measurements, "LCI consistently receives call records that are well over 48 hours old"; and "NYNEX does not transmit usage information on weekends and holidays." [3/24/97 LCI Letter] As to provisioning timeliness: "NYNEX is failing to meet promised due dates on an unacceptably high percentage of orders," e.g., "[o]ver a recent 30 day period, NYNEX missed due dates on 36% of orders issued by LCI's customer service center," "LCI currently has basic orders that have been issued up to ten days ago without confirmation," and "[o]n two occasions, LCI's prospective customers switched back to NYNEX out of frustration over the inability to get desired services." [3/24/97 LCI Letter]

ii.   Lack of an Operationally Ready System

As MCI has explained, "[a]t the present time and for the foreseeable future, *all* orders for resale and unbundled network elements involve some degree of manual processing by NYT"

(New York Telephone or NYNEX New York). [Spivy at 16] Thus, on the resale side, "NYT must manually input MCI customer information" and "for unbundled network elements" "the ultimate provisioning function is done manually" and "NYT does not provide 24 hour per day, seven day per week (24 x 7) access, even manually, to some vital OSS functions" (which NYT does for itself). [Spivy at 16] Moreover, "many of the interfaces NYT purports or promises to employ are plainly unsatisfactory to meet competitive needs because (a) the interfaces do not provide the type of interactivity that meets real competitive demand; and/or (b) they impose excessive demands on CLECs to adapt their own systems to interfaces that may prove entirely unique to NYT." [Spivy at 16-17 (explaining also why the Miller affidavit in support of NYT is "woefully" deficient)]

Contrary to the general impression intended by NYNEX, "it is clear that the electronic access methods to NYT functions are not operationally ready to handle reasonable commercial transaction volumes." [Spivy at 18 (explaining how the Miller affidavit actually "concedes that its own systems are outdated")] And contrary to the specific impression intended by NYNEX, the DCAS (Direct Customer Access System) gateway touted by NYNEX does not provide adequate or nondiscriminatory access. [Spivy at 19 (explaining that the Miller affidavit is "misleading, if not downright incorrect")] Thus: (i) the DCAS electronic interface format (EIF), which is not "a 'universal' data format" as the Miller affidavit asserts and "is unlikely ever to be accepted as one," "is merely a batch transfer-type system which is wholly inadequate for certain OSS functions, such as pre-ordering" because "effective pre-ordering requires real-time access to NYT computers while the customer is on the line") [Spivy at 19]; (ii) "NYT's Web GUI interface is riddled with both design and implementation problems" (e.g., failure to "support a shared manager/work group function for ordering," failure to allow CLECs to view three ANIs

per request as NYT can, failure to "provide table references of USOC codes) "is far from a true electronic link," does "not provide for obtaining in a real-time on-line manner" resulting in "significant delays," is cumbersome to use because of the "numerous steps" involved, and "is specific to NYNEX" [Spivy at 21-24 (explaining how the Miller affidavit ignores these serious shortcomings)]; and (iii) contrary to the Miller affidavit's contention that "an alternative data format, known as Electronic Data Interchange" (EDI) "has been available since October 8, 1996," "NYT's EDI interfaces have not yet been tested and are not at all operational" and, even if they "were operational, the EDI interfaces are planned to support only a small fraction of the products and services to which CLECs need access (e.g., "resale services that are unavailable through NYT's EDI interface include: ISDN Basic Rate Interface, ISDN Primary Rate Interface, private lines, intraLATA frame relay, Centrex services, and PBX/DID trunks"; for "unbundled network elements, NYNEX's EDI does not support orders for loops, line switch ports, trunk switch ports, or network interface devices") [Spivy at 24-25].

MCI has encountered specific deficiencies in each of the basic OSS functionalities:

(i)   for pre-ordering, there are at least six sub-functions (block off direct inward dial (DID) number inquiry, telephone number's trouble history, directory listings information, DID trunk inquiry, available primary interexchange carrier (PIC) inquiry, and unbundled network element service provider inquiry) that "must be electronically supported" "for local competition to be fully viable" that are missing from NYNEX's offering as explained by the Miller affidavit [Spivy at 26];

(ii) for ordering and provisioning, even NYNEX admits that "[a]t present, most service orders require manual intervention by a NYNEX New York wholesale representative" but, actually, the reality is that "*all*" NYT orders "require some degree of manual intervention" and NYNEX "is unwilling to commit to "*eliminating* the need for manual intervention" [Spivy at 28-29];

(iii) for service and repair, the RETAS (Resale Trouble Administration System) employed by NYNEX "is proprietary to NYT, and is not an industry standard" and, "[u]nless and until NYT commits to implementing an electronically bonded industry standard OSS for repair and maintenance, it cannot be offering true parity access to its OSS" [Spivy at 35-36]; and

(iv)   for billing, "MCI's experience to date has shown that, although NYT may have designed and even tested some of its billing systems for CLECs, those systems are not operationally ready" and, while "MCI has not yet received billing or usage information for any actual traffic," "MCI has already discerned certain problems with NYT's systems" (e.g., "due to limitations in NYT's billing system, MCI will receive 14 separate bills from NYT" that will contribute to making the auditing process "extremely difficult, if not impossible") and "NYT does not appear to have *any* system in place for billing unbundled network elements") [Spivy at 36-37].

Further, NYNEX's contention, through the Miller affidavit, that its EIF "is a universal specification" suggesting a "universally used format for sending orders" "could not be further from the truth," because "of the five [interfaces] that were being evaluated" by the ECIC committee as a possible standard, NYNEX's was not only rejected, it "was evaluated as the least favorable alternative." [TechConf at 424-25]

Likewise, "Community Telephone's access to OSS is not at parity with the access experienced by NYT's personnel in its retail operations," which "precludes Community Telephone from providing the same quality and level of service to its customers that NYT provides to its own retail customers" and "impair[s]" "Community Telephone's ability to compete in the local exchange market" and "provide service to its customers." [Kennedy at 3 ("Without the ability to access the information in the OSS, a reseller will be unable to place orders and serve customers")] The Web/GUI interface, as Community Telephone explained, requires "duplicate [manual] entry of data," which "not only increases the work time of Community Telephone's customer service representatives, but also enhances the possibility of errors in preparing the service orders." [Kennedy at 4-5] And the EIF interface, Community Telephone has found, fails to provide access "at parity, in terms of accuracy, reliability, and timeliness, with the access that NYT provides to itself." [Kennedy at 5-7 (explaining that the "deficiencies in NYT's OSS include": a response time for pre-ordering, ordering, and repair transactions of 1 minute, 40 seconds compared to a few seconds for NYT; changes to EIF

specifications, "rendering Community Telephone unable to transmit orders or messages to NYT for days"; a failure to provide "the ability to view service orders as processed by NYT to check for errors," with the result that "customers have received services they did not want, or did not receive services that they requested"; and "NYT's system is unable to distinguish between resellers' customers and its own retail customers" as a result of which "Community Telephone customers receive mass mailings addressed to 'Dear NYNEX customer' for months after they have switched carriers, or receive follow-up calls from NYT that refer to the 'NYT service' or 'NYNEX service' that they have received")] In addition, "the overall performance of NYT's operational support systems is poor," "NYT's general approach has been to promise changes in some areas (without giving a date certain for resolution) and to deny our requests for change in other areas," and "NYT has not been willing to accept financial responsibility for errors that it makes in the manual entry of data." [Kennedy at 38-39] Not surprisingly, the "problems" with NYNEX's OSS "have made it impossible for Community Telephone to offer local service that is equal in quality, reliability, timeliness, and availability to the service that NYT provides to its own customers." [Kennedy at 39-40 ("Not a day goes by when a service order is not queried back by NYT, or when the service order as processed is inconsistent with the request that we submitted")]

In AT&T's experience as well, NYNEX OSSs are not operationally ready either for resold local services or unbundled network elements. [Hou at 13 ("Neither the information submitted in NYT's draft 271 Application to this Commission nor any data available to AT&T show that NYT is operationally ready to provide AT&T (or any other CLEC) with parity access"); AT&T Brief at 33 (summarizing the "defects in NYT's OSSs")] "To begin with, NYT has not provided any baseline data on speed, accuracy or reliability of data accessed from its

electronic OSS systems when those systems are used to provide service to NYT's internal operations or to its end user customers. Nor has NYT provided any comparisons of its OSS service provisioning for CLECs with its provisioning of OSS services to itself or its end users. Just as important, NYT has not provided significant data on the present and planned future capacities of any of its OSS systems." [Hou at 13-14, 16 (explaining why the test proposed by the Miller affidavit "is inadequate to determine whether CLECs are receiving full parity access to OSS systems" and that the Butler and Coffey affidavits likewise are deficient)] Further, contrary to the Miller affidavit, AT&T, just as MCI and LCI, has found that none of the three interfaces "is currently operating in a commercially reasonable manner." [Hou at 18-28 (describing those deficiencies in detail)] These failures on NYNEX's part have persisted notwithstanding substantial efforts by AT&T to resolve them. [Hou at 28-42 (describing the numerous meetings and other efforts, none of which produced a significant enough commitment from NYNEX to rectify the problems, e.g., "NYT has not made any formal commitments on this subject [prompt return of firm order commitments (FOCs)] or documented its ability to return FOCs in a timely manner, which is necessary to resolve this problem," and "it is unclear whether NYT will ever apply fully automated processing to all orders"); see also Halloran at 13-15]

In addition, contrary to the purported assurances in the Coffey affidavit, "NYT's failure to propose appropriate standards for service disaggregation makes it impossible to determine whether NYT's provisioning intervals for its own customers are comparable with the provisioning intervals it provides to CLEC customers," and "[w]ithout proof of comparable provisioning intervals, NYT cannot demonstrate that its provisioning processes meet the nondiscrimination requirements of the Communications Act" and "CLECs will be unable to assure their customers that they will receive comparable provisioning to NYT customers." [Hou

at 48-54 (discussing NYNEX's OSS measurement shortcomings in detail and how the Coffee affidavit is deficient in that regard)]

NYT's "OSS systems are not currently configured to handle many combinations of elements, including the UNE platform. This is a situation in which NYT has made the promise on paper, but there is no evidence to support NYT's claim," and "NYT has not developed detailed written procedures governing combinations and instead states its assumption 'that it is technically feasible to combine network elements in the same manner that NYNEX New York configures them in its network.'" [Halloran at 16 (citing the Butler affidavit)]

Further, NYNEX has "not provided a standard listing of commonly requested combinations that it is committed to providing to CLECs upon request." [Halloran at 16 (referencing NYNEX witness statements and its SGAT)] Pointedly, "[s]ection 5.9 of the SGAT, which discusses OSS in the context of UNEs, is simply a cursory outline that does not even describe the interfaces that NYT purports to offer" -- "[i]nstead, it asserts only that NYT 'provides access' to CLECs to the functionalities of NYT's OSSs in connection with the purchase of UNEs or resold services (§ 5.9.1), and that access to OSSs will be through the Direct Customer Access System ('DCAS') gateway (§ 5.9.2)," but "offers no details or specifications regarding the availability, accuracy, functions or reliability of such functions," i.e., of pre-ordering, ordering and provisioning, maintenance/repair, and billing. [AT&T Brief at 37; see also AT&T Brief at 79-103 for a similar discussion concerning NYNEX's OSS defects in the resale environment]

Sprint too "has identified several areas of deficiency that prevent Sprint from offering at parity competitive local services to the consumers of New York." [Nelson at 3] Among these deficiencies on NYNEX's part are: (i) lack of migration "'as-specified' capability (that allows

"ordering service by identifying the services the customer has requested") which "requires Sprint and other NYNEX competitors to develop unique ordering processes for NYNEX" and is made available by "nearly all other incumbent LECs"; and (ii) BTN (billing telephone number) identification capability (which allows identification of a customer's billing number) is not available to CLECs but is available to NYNEX. [Nelson at 3-5]

LCI recently has experienced a slowdown in response time when pulling CSRs. LCI also is concerned that NYNEX has not made LCI aware of any future plans to provide customer service information electronically other than via the GUI system. The GUI system requires manual intervention by LCI to save the CSR, so no true app-to-app interface exists. Also, for preordering and ordering, LCI has experienced NYNEX's lack of alternative procedures in the event of operational failures. NYNEX has informed LCI of its intention to provide completion date information via EDI at some time in the future, however currently the only way to receive this information is via fax.

iii. NYNEX's Concessions of Its Shortcomings

At a technical conference conducted by the New York Public Service Commission, NYNEX conceded myriad shortcomings in its providing adequate nondiscriminatory OSS functions, including:

(i)   NYNEX currently cannot provide electronic notification of rejected orders [TechConf at 490];

(ii)   CLECs cannot change or correct their orders electronically until a service order has been assigned [TechConf at 492];

(iii)   CLECs cannot place "migration as specified" orders, which substantially increases their time and cost in placing orders to NYNEX [TechConf at 436];

(iv)   CLECs cannot, through NYNEX's OSS, determine a customer's billing telephone number from the customer's working telephone number, while NYNEX's own retail service personnel can obtain such information [TechConf at 448-49]; and

(v)   NYNEX has not done any substantial testing of the operational capabilities of its OSS interfaces [TechConf at 442-43].

Others at that conference identified even more problems with NYNEX's OSS, including:

(i)   "[t]he trouble process has been very convoluted" -- "[i]t's been a combination of faxing, chasing down the appropriate repair personnel via phone and following through on the system like that," and "we are unable to enter trouble tickets into the GUI system" [TechConf at 388];

(ii)   "there are still many orders you can put in that do not flow directly to NYNEX's Operating Support Systems" [TechConf at 389];

(iii)   because "we only know working telephone numbers and not bill telephone numbers," "we are unable to access a customer's service record" [TechConf at 397];

(iv)   where a reasonable response time for accessing various OSS information would be under 10 seconds, the "response time has been a minute and 40 seconds" [TechConf at 397-98];

(v)   not only is the Web/GUI "not an electronic interface" [TechConf at 403], which in itself does not provide parity because it "requires dual entry" and "provides . . . no management reports" [TechConf at 434-35], there also "seemed to be areas of the GUI that were not functionally complete, scenarios that were not yet programmed into the GUI" -- "it was very poor support for being able to support multiple features on a single order and it is very cumbersome for the CLEC" and "[w]e experience a lot of error messages that we cannot interpret" [TechConf at 416]; and

(vi)   there is a "lack of flow through capability," and "[w]ithout the flow through capability, which means you have manual intervention, all of these interface systems whether they are GUI, whether they are EIF or whether they are EDI *are* "fancy E-mail systems" [TechConf at 435].

[For a further summary of NYNEX's acknowledgments of its OSS shortcomings at the Technical Conference, see LCI Brief at 14-17] *

iv.   *View of the State Agencies*

Most recently, the Administrative Law Judge of the New York Department of Public Service reviewed the status of NYNEX's SGAT. [NY ALJ Letter] "Following consideration of

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*   Since the Technical Conference, NYNEX has purported to make improvements in some of the performance capabilities of its OSS, but concededly not all of them. Moreover, it remains to be seen upon testing the actual extent of those improvements, and NYNEX still has not offered its own measurement capabilities that are essential to allow a meaningful determination as to whether or not NYNEX is providing parity of access.

the record of the Technical Conference, the parties' briefs and reply briefs, and the informal discussions between parties and advisory staff," she declared: "Because of the shortcomings in this record, a recommendation to the Commission to approve the Statement is not feasible." [NY ALJ Letter ¶ 2]

d.   *Bell Atlantic's Failures*

i.   *Lack of Operational Readiness*

To the best of LCI's current information, Bell Atlantic apparently has no functioning, tested and proven reliable OSS with any reseller or provider of network elements.

Illustratively, in Pennsylvania, "Bell Atlantic still has a long way to go before it will be able to provide CLECs with workable and non-discriminatory access to its operations support systems," in that its OSS, including its ordering and billing interfaces, are not in a state of operational readiness [Kirchberger-P at 2, 6], as even Bell Atlantic concedes [see Kirchberger-P at 6 (citing a Bell Atlantic official's concession that, while Bell Atlantic has done the "initial development" of an ordering interface, "it will probably be several years . . . before all LSR [local service request] types are mechanized," and Bell Atlantic "is still 'conducting an operational test to validate the production capabilities of the billing system'")] Moreover, Bell Atlantic's proposed ordering procedure will require Bell Atlantic employees to "manually input [CLECs'] orders into Bell Atlantic's service ordering process systems." [Kirchberger-P at 12] Such manual processing is "incapable of handling large volumes of transactions in a consistent, accurate, and timely fashion," particularly here where "Bell Atlantic has not committed to any minimum staffing levels to perform the required rekeying of CLEC orders." [Kirchberger-P at 14 (explaining the lack of parity because Bell Atlantic's own system does not require this manual intervention)] Bell Atlantic has not yet agreed to "any meaningful measurement plan for

comparing access to [OSS] that it will provide to CLECs with the access Bell Atlantic provides to itself." [Kirchberger-P at 19] To make matters worse, Bell Atlantic "has not even disclosed what OSS functions or interfaces are being tested, or what kinds of service order types, or volumes are involved." [Kirchberger-P at 10] Moreover, Bell Atlantic has not provided AT&T, with whom tests were to start in late March 1997, with "the OSS interfaces necessary for testing." [Kirchberger-P at 10]

MCI recounts similar problems in Pennsylvania with Bell Atlantic. Among the more significant:

(i)   Bell Atlantic has not "successfully tested its OSS with a CLEC, much less employed its OSS successfully in a competitive environment" [Morson at 16];

(ii)   as of March 6, Bell Atlantic "was not yet able to provide even a demonstration of its preordering interface" [Morson at 16-17];

(iii)   Bell Atlantic "has only indicated an intent to proceed with a test for resale," and has "not [even gone that far] for unbundled elements" [Morson at 17];

(iv)   Bell Atlantic has not committed to particular OSS standards for the future (refusing to state "whether it will adopt the standard [USOC] codes" [Morson at 18];

(v)   Bell Atlantic has "refused to agree to adequate performance standards and reporting requirements . . . [which] are critical in order for CLECs to be able to determine if Bell Atlantic's stated intention to provide reasonable service at parity with the service provided to Bell Atlantic's own customers" has been achieved [Morson at 18];

(vi)   Bell Atlantic's pre-ordering Electronics Communication Gateway (ECG) is "incomplete" because it does not provide information on blocks of direct inward dialing numbers (DID) inquiry, telephone number trouble histories, DID trunk inquiry or unbundled network elements service provider inquiry, and therefore does not give "all information that a CLEC requires at the pre-ordering stage in order to convert an existing customer's services through an unbundled situation involving another CLEC" [Morson at 20];

(vii)   Bell Atlantic's proposed ordering process "requires manual intervention by Bell Atlantic service representatives" [Morson at 28];

(viii)   Bell Atlantic has imposed a "manual process for jeopardy" such that notification of delays in turn-on dates are done in two steps for Bell Atlantic but require three manual steps for the CLECs [Morson at 30-31];

(ix)   Bell Atlantic's loop maintenance operating system (LMOS) trouble handling system is "severely limited in its ability to support cases of trouble sent over Bell Atlantic's OSS interface," because it has "far fewer dedicated fields than Bell Atlantic uses for itself" [Morson at 33];

(x)   Bell Atlantic has announced it will use the customer records information system (CRIS) format, rather than the carrier access billing system (CABS) for the sale of some unbundled elements, even though "CABS is the approved OBF standard for resale billing" [Morson at 36]; and

(xi)   "there have been numerous problems with the [transmitting of customer] information" and related "systems failures [that] have caused substantial customer confusion and dissatisfaction" and "have also imposed losses on MCI that could amount to more than a million dollars in lost revenue." [Tavidian ¶¶ 6-8]

In sum, "[g]iven the state of the systems that are needed to support pre-ordering, ordering, provisioning, and billing," "it is not surprising that BA's report, and its SGAT, make only vague and generalized promises": "Simply put, the necessary systems are for the most part not there yet." [Agatston at 5]

Sprint has encountered similar shortcomings with Bell Atlantic in Pennsylvania. "Although Bell is developing interfaces for each of the OSS functions," "the interfaces are not currently available" and "the proposed OSS interfaces are only interim solutions." [Smith at 5] Further, "no testing results have been made available to Sprint" and, "[w]hile Bell Atlantic has provided some data to Sprint, critical information is still missing which includes a test bill file format, daily usage file format, ECG availability and requirements, and a demonstration program to name a few," and "[S]print cannot finalize its systems interface design until Bell Atlantic has provided adequate detailed system information to Sprint to complete the process." [Smith at 7-8] And, "were Sprint to offer local service, and were Sprint's customers to experience delays in repair relative to Bell Atlantic," and Bell Atlantic were not "to provide Sprint with reasonable, timely, and economical access to Bell Atlantic's operations systems, customer records, and billing data," "Sprint's brand name would be at risk." [Sywenki at 27]

Bell Atlantic's progress in Delaware [Kirchberger-D] and in New Jersey [Kirchberger-N] is no better. Indeed, "Bell Atlantic does not even contend at this time that it has deployed operationally ready OSS interfaces for all OSS functions for its resale services and unbundled network elements. Rather, Bell Atlantic states only that it 'will provide competing carriers access to its operations support systems' at some undefined time in the future." [Kirchberger-N at 8 (citing the Albert affidavit)] And test "results [with US Network] show that over the three-month test period, only six residential customers and two business customers were tested, and that, even with this limited number of customers tested, problems with Bell Atlantic's systems surfaced," as also was the case with early test results with AT&T. [Kirchberger-N at 14, 16]

ii. Additional Ways in Which Parity of Access Is Not Provided by Bell Atlantic

Beyond the deficiencies in operational readiness, there are serious deficiencies in attaining parity. For example, "[t]he interfaces presently being proposed by Bell Atlantic will not permit CLECs to communicate with Bell Atlantic's ordering and provisioning systems at all. Rather, ... those interfaces will only enable a CLEC to submit orders to Bell Atlantic's 'Competitive LEC Sales and Service [Center] (CSSC) representatives,' who will then manually input the orders into Bell Atlantic's service order processing system," and actually, "the Bell Atlantic service representative will manually rekey a CLEC's order not once, but multiple times." [Kirchberger-N at 18-19 (citing the Albert affidavit)] And, as "Bell Atlantic has further stated that a fully 'mechanized' process will not be available for all types of CLEC orders for 'several years." [Kirchberger-N at 19] In the meantime, this "ordering procedure, [which] amounts to nothing more than the equivalent of order by facsimile," presents "a serious concern because it will delay the ordering and provisioning process for CLECs, including the receipt of firm order confirmations or order rejection," it "will prevent the CLEC agent from receiving

prompt notification of the status of service orders and will preclude CLECs from making edits or corrections to orders to avoid order rejection while the customer is still 'on-line.'" [Kirchberger-N at 20-21 (explaining also the advantage that Bell Atlantic retains in this process); see also Kirchberger-N at 24-26 (describing other aspects of the ordering and processing where Bell Atlantic is not providing parity of access, e.g., batch-processing CLEC orders at 30-minute intervals compared to Bell Atlantic's own real-time processing; sending firm order confirmations to CLECs 24 hours after the order is sent to Bell Atlantic compared to Bell Atlantic's own immediate receipt of such confirmations; delaying the daily usage feed for CLEC customers beyond 72 hours, which prevents "provisioning of new service for CLEC customers in fewer than three days, a limitation that does not apply to the provisioning of service for Bell Atlantic's own customers" and, "[i]f the provisioning of an order is in jeopardy, the CLEC might not even know that there is a problem until it is too late to notify the customer and reschedule the installation; and "Bell Atlantic's pre-ordering interface -- the Electronic Communications Gateway -- does not provide parity because this gateway does not enable [a CLEC] to move directly from Bell Atlantic's pre-ordering system to its ordering system, a capability that Bell Atlantic's own service representatives have today")]

Further, "Bell Atlantic has failed to show that the OSS interfaces and other access procedures which it proposes will have adequate capacity to handle the volume of CLEC orders and other service requests that can reasonably be expected" (which presents "a particular concern" because of "the 100 percent level of manual intervention which Bell Atlantic proposes to rely on to enter all CLEC local service orders"), and "Bell Atlantic has not agreed to any meaningful measurement plan for comparing the access to operations support system that it will provide to CLECs with the access that Bell Atlantic provides to itself." [Kirchberger-N at 26-29]

e. BellSouth's Failures

i. Lack of Operational Readiness

"BellSouth has informed Intermedia that unbundled elements will ultimately be billed through the CRIS system," even though "[b]illing through the CABS system [which is available now] ... is more efficient, less costly, and can be implemented more quickly," and "because CABS is a carrier-based system, it can generate the data that Intermedia needs to prepare bills and verify calls without costly and time-consuming modifications," and "CRIS cannot provide these features." [Strow at 16] In the meantime, four months after the deadline agreed to by BellSouth with Intermedia, "Intermedia is still not receiving from BellSouth the information necessary for Intermedia to bill its customers." [Strow at 43] Thus, "Intermedia needs, and has requested, an electronic disaggregated version of billing information rather than a paper version of a bill that aggregates all of the information," "[y]et BellSouth is still providing Intermedia with paper versions of aggregated billing data." [Strow at 43] As a result, Intermedia must "dedicate personnel to manually review each BellSouth bill and manually input the information into Intermedia's own computerized database before Intermedia can generate a bill," "which imposes a burdensome and costly process on Intermedia that would be completely eliminated if BellSouth provided Intermedia with data in electronic format, either on computer disk or via e-mail," and prevents Intermedia from performing bill verification and properly billing its resale customers. [Strow at 43]

MFS has encountered similar problems with BellSouth [see Meade at 13-14 (discussing problems with obtaining CSRs, disconnects and failures to reconnect promptly, and inadequacies in the LEC internal cutover notification or ordering procedures)], which difficulties "have hampered markedly MFS' ability to provide a local exchange service that is competitive with the

service the LEC provides and in other markets have damaged MFS' relationships with its customers." [Meade at 13]. Simply put: "Where there have been service problems, the customer naturally blames MFS, as its local exchange carrier, even though the root of the problem may lie with the LEC"; and '[w]hen there are problem conversions, there is a significant risk that a customer will lose confidence in MFS and switch back to the LEC." [Meade at 13]

MCI has encountered similar or even worse difficulties with BellSouth's providing OSS functions. Thus:

(i)   "[n]umerous functions rely on manual intervention";

(ii)   "BellSouth's SGAT does not promise to adhere to industry standards";

(iii)   its "interfaces do not support many of [the pre-ordering] sub-functions supplying the real-time information that CLECs will need to provide to their potential customers in order to have any hope of competing against BellSouth";

(iv)   it "does not provide real-time access to CSRs," which "are necessary for CLECs to place orders for both unbundled network elements and resold services";

(v)   it requires written LOAs "from customers before it will grant CLECs access to CSRs" which poses an enormous hurdle to obtaining new customers who prefer to set up business over the phone and will not go through this extra unnecessary step, as BellSouth itself recognizes since it "has only required verbal authorizations from its own customers prior to obtaining their customer payment histories from other ILECs," and which prevents CLEC customer service representatives from "check[ing] that all of the customer information needed to submit the order is correct without calling the customer back to verify";

(vi)   it "has designed a cumbersome interim method for customers to select telephone numbers during pre-ordering in cases where a CLEC does not have an NXX code";

(vii)   it "does not have the capability to permit CLECs to schedule due dates over the phone, even for the most basic exchange services";

(viii) it has proposed to use a web-type service for CLECs' access to databases necessary for pre-ordering, even though such a web-type service has "severe limitations, in that they preclude obtaining data in a real-time, on-line manner for customers waiting on the phone" and BellSouth itself has "one integrated platform through which [its customer services representatives] take customers' orders" over the phone";

(ix)   "BellSouth's ordering procedures require far too many manual interventions" to be adequate because they "will inevitably lead to significant errors and delay" and they "do not provide parity of service with that available to BellSouth from itself"

(Bell South "has not provided for electronic ordering of interim local numbering portability";

(x)   it "provides for no 'flow through' from ordering to provisioning" "which will likely create a bottleneck resulting in significant backlogs for resale orders as volumes increase";

(xi)   a "manual notification of service denial and restoration of orders" as BellSouth intends "creates far too many opportunities for error or delay and denies CLECs the ability to manage their finances properly";

(xii)   BellSouth "provides no information on how CLECs can order some of the more complex service offerings -- such as Centrex Services, PBX trunks and ISDN services -- that are critical for CLECs to be able to offer";

(xiii) BellSouth "will not permit CLECs to submit orders to switch a customer 'as specified," which "means that CLECs must obtain the CSRs of their new customers before ordering and then ... the CLEC would have to inform BellSouth which features should be added and which should be deleted," which, "[w]hen combined with Bell South's requirement that CLECs obtain LOAs before receiving CSRs, it will be extremely difficult for CLECs to order service in a timely manner");

(xiv)   BellSouth's provisioning interfaces are inadequate because they too require manual intervention for firm order confirmation, change in order status and order completion, and even requires the CLEC to "negotiate" service due dates where more than nine lines or trunks are involved;

(xv)   BellSouth "has provided scant information on the details of how to process a trouble report, how to escalate, expected service levels, or performance metrics," which makes it "impossible for CLECs to measure BellSouth's responsiveness to repair requests";

(xvi)   "[f]or resale competitors, BellSouth is not even offering the small comfort of the LCSC to handle repair issues" so that resellers "apparently will have to call into the same service centers that BellSouth has established for retail customers and, in all likelihood, engage in awkward, three-way telephone calls with their customers and the BellSouth service center" and BellSouth "states that it retains the right to contact reseller customers directly for maintenance purposes"; and

(xvii) BellSouth, at least for some unspecified interim period, will use the CRIS billing system, instead of the industry-standard CABS, which is inadequate because "CRIS bills are almost impossible to audit, they use idiosyncratic protocols, and they do not provide sufficiently specific information to determine whether what has been ordered is being billed" and BellSouth has engaged in a "pattern of billing difficulties [that] indicates that BellSouth is unlikely to be able to implement accurate, nationally standard billing practices in the near future" (BellSouth's billing deficiencies may result in CLECs paying substantially more than they actually owe and the lack of automation will require CLECs to hire personnel at significant cost to audit bills). [Martinez at 16-17, 19-39]

In short, "[t]he systems BellSouth presently has in place to interface with CLECs do not provide a reliable basis for full scale competition in Georgia," and its "interim OSS solutions are far too cumbersome to allow CLECs to even approach the levels of customer service provided by BellSouth." [Martinez at 39]

AT&T likewise has encountered substantial difficulties accessing BellSouth's OSS functionality. [See generally AT&T Response (correcting BellSouth's April 15 Monthly Surveillance Report for Electronic Interfaces] Thus, AT&T and BellSouth have been unable to agree "on the necessary data dictionaries to build, communication protocols to use, or transaction identifications with associated data elements," nor have they been able to agree on "the rules for interaction with respect to OSS for pre-ordering, ordering, provisioning, maintenance and repair, and billing [which must be done] before the two companies can effectively transact business." [Pfau-G at 8-9] Further, OSS access involves more extensive manual processing, requiring "two manual input steps," when utilized by a CLEC, which BellSouth does not face for itself. [Pfau-G at 10] The critical "end-to-end testing process [which "is necessary so that users of the interface (CLECs) have confidence that the information flow is predictable and subject to replication"] for resale with BellSouth has only just started and no testing for UNEs interfaces between AT&T and BellSouth has begun" (and resale testing results will be irrelevant for UNE purposes). [Pfau-G at 11-12] These problems are difficult in any circumstance, but the difficulty is compounded because there is no indication that BellSouth could handle the volumes involved to enable meaningful competition -- which would be over 5,000 orders per day. [Pfau-G at 13]

More generally, it has been noted that "[t]here does not appear to be any 'final' or permanent method or methods by which it can be concluded that the OSS offered at a given time suffices for future interactions between BellSouth and CLECs." [CUC at 6] Further, "many of

the OSS systems offered by BellSouth have not been implemented or tested under circumstances in which there are large volumes of orders." [CUC at 6]

ii. View of the State Agencies

In light of these failures, it is not surprising that the Georgia Public Service Commission, "[b]ased on a thorough review of the entire body of evidence presented in the record and consideration of general regulatory policy issues," "finds as a matter of fact and concludes as a matter of law" that BellSouth "does not yet fully comply with all of the standards and requirements of Section 251 and 252(d) of the Act, and [its SGAT] therefore should be rejected." [Georgia Order at 2, 6] Specifically, the Georgia PSC concluded that, "[f]or unbundled access to network elements and for resale, BellSouth has not yet demonstrated that it is able to provide access to operational support systems ('OSS') on a nondiscriminatory basis that places CLECs at parity with BellSouth." [Georgia Order at 10]

The Georgia PSC explained as follows: "Nondiscriminatory access to operation support systems (OSS) is an integral part of providing access to unbundled network elements, as well as making services available for resale. The record shows that BellSouth has not yet demonstrated that it is able to fulfill these important aspects of the Statement's provisions on a nondiscriminatory basis that places CLECs at parity with BellSouth. [Georgia Order at 28] "In addition, the pre-ordering and ordering interim 'web' interfaces, and the interfaces for maintenance and repair, are not projected to be fully operational for roughly two months"; "BellSouth is still working on an interface for Customer Records Information System ('CRIS') billing and for local usage data, both of which may not be ready for two months." [Georgia Order at 28-29] And, "[b]efore BellSouth can offer the interfaces for actual CLEC use, testing must be completed," and to a great extent, "testing has not begun." [Georgia Order at 29]

f.   Southwestern Bell's Failures.

i.   View of the Department of Justice

The Oklahoma Corporation Commission (OCC), in a split decision, approved SBC Communications' (SBC) section 271 application. Nevertheless, the reality is, as the United States Department of Justice, with full knowledge of the OCC's decision, recently confirmed, SBC in Oklahoma has not provided the requisite OSS access. [See DOJ Evaluation at 24-25 (explaining that: (i) "the OCC majority did not adopt detailed factual findings" and "their conclusions appear to rest, in large part, on what we believe to be an incorrect legal interpretation of the checklist"; and (ii) "[i]n contrast to the OCC's limited view," the administrative law judge, who found SBC to be lacking, also was supported by "the dissenting OCC Commissioner, the Oklahoma Attorney General, and the OCC staff")] Specifically, the DOJ concluded not only that "SBC has not demonstrated that its wholesale support processes are sufficient to make resale services and unbundled elements practicably available when requested by a competitor," "[i]ndeed, there is evidence in the record to suggest that SBC has thwarted CLEC attempts to test and commercially use the wholesale support processes SBC claims to provide," and "has failed to demonstrate even through internal testing the operation of its automated processes for making resale services and unbundled elements meaningfully available." [DOJ Evaluation at 30] And, "[b]ecause none of SBC's automated wholesale support processes are operational -- commercially or otherwise -- SBC cannot make a demonstration of reliable performance and establish performance measures to ensure reliable support service post-entry. More importantly, even if SBC's processes were operating at some level, SBC has not established a sufficiently comprehensive set of performance standards, nor supplied its own retail performance information, to permit such a comparison." [DOJ Evaluation at 60-61]

ii. View of the CLECs

"While SWBT [SBC] has offered several OSS interfaces for Sprint to place resold service orders, some of which appear to be the same which SWBT uses for their own orders, these interfaces have not been tested for CLEC services nor do they offer Sprint the ability to attain full operational parity with SWBT." [Meyer-O at 8 and Ex. 1 (detailing the shortcomings of SWBT's providing OSS functionality)] "Neither EDI nor electronic bonding is operationally available today with SWBT" [Meyer-O at 9], "there is no area of OSS interface functionality that meets Sprint's requirements for operational parity and in fact, the most optimistic date that operational parity with SWBT can be attained is probably late 1998." [Meyer-O at 14]

AT&T also has found serious deficiencies in SWBT's provision of OSS functionality. Thus, "SWBT's proposed OSS interfaces are not yet operationally ready" [Dalton at 5] in that: (i) "SWBT has not made available any interface or interface specifications that would make it feasible for AT&T to offer local service by means of all of the approved unbundled network elements, including a platform of elements" [Dalton at 5]; and (ii) "even with respect to OSSs for resold services, . . . SWBT is still in the process of clarifying and supplementing its ordering and provisioning interface specifications" and testing has not been completed. [Dalton at 5] "[E]ven SWBT admits that development work is not complete on several functions for pre-ordering, ordering and provisioning, and billing for resale." [Dalton-R at 3 (citing SWBT status report filed in Texas on Electronic Implementations)] In short, "[a]dditional testing and implementation issues must be completed for Resale OSSs before these interfaces can be considered operationally ready," and "[s]ignificant negotiations, development, design, implementation, and testing must be completed before the UNE OSSs are operationally ready." [Dalton-R at 4]

Most recently, CompTel reviewed Southwestern Bell's OSS systems and found them "not commercially available at this time." [CompTel Opposition at 23] Specifically, "[m]any of its electronic ordering and provisioning systems, most notably its EASE and EDI Gateway systems, are designed only for resold services," and "[t]hey do not support ordering, provisioning or status for unbundled network elements, such as local switching or unbundled loops. Moreover, EASE excludes larger business customers" in that it "is limited to business customers with fewer than 30 lines." [CompTel Opposition at 23-24 (explaining further that SBC's own personnel have electronic access to ordering for these customers")] "Clearly SBC's systems are new and at this point unproven": "SBC describes the OSS it plans (or hopes) to implement, but admits that '*no* CLECs are using, on a "live" basis, any of the electronic interfaces SWBT makes available for pre-ordering, ordering/provisioning, maintenance/repair, and billing.'" [CompTel Opposition at 24]

As to Southwestern Bell in Kansas, "[t]here is no area of OSS interface functionality that meets Sprint's requirements for operational parity and in fact, the most optimistic date that operational parity with SWBT can be attained is probably late 1998." [Meyer-K at 13 and Ex. 1 (detailing precisely "where SWBT stands with respect to each of Sprint's requirements for operational parity for each functional component of operational interface")] As Sprint understands it, "[t]here are major limiting factors for SWBT systems to provide operational parity to Sprint for resold services" [Meyer-K at 13 ("[a]utomated systems and interfaces for ordering resale services based on EDI Version 7 industry standards need to be built" and "tested")], and "Sprint is not aware of any SWBT systems for OSS interfaces that are currently designed, tested, or operational for CLECs to order, maintain, or accept billing for unbundled network elements from SWBT" [Meyer-K at 14] In addition, "SWBT has not been timely in

providing information that Sprint has requested and needs in order to become operationally ready." [Meyer-K at 14 ("SWBT has not provided Sprint any process flow diagrams or documentation" and "has not provided the information requested" "such as street address guides, current directory close dates, service availability by switch")]

g. *US West's Failures*

US West appears to be making less progress in meeting the OSS requirements than any other ILEC. On December 12, 1996, US West filed a petition requesting a "waiver" from the "requirements established in the [Order]" to have electronic interfaces to its OSS by the ordered deadline. [US West Petition for Waiver at 1] US West declared that it was "impossible" for it to meet the deadline, explaining that it had been proceeding under the erroneous assumption "that electronic access to OSSs would be somewhat circumscribed, being required only in the areas of call routing and control," and that "unlike some other ILECs," US West "was not subject to any state commission with respect to OSS access." [US West Petition at 2-3] The request for waiver was denied, and the Commission's Second Order on Recon reconfirmed that providing OSS access as required by the Order was "technically feasible" and "reasonable." [Second Order on Recon ¶¶ 2, 5, 11, 13, 15]

h. *GTE's Failures*

While it is difficult to determine the precise extent or lack of progress by GTE on providing adequate OSS functions, certain conclusions can be drawn: (i) GTE is "migrating to some new systems," and also has "a subsequent release scheduled that may not require the new system" -- "[t]hat's still being architectured" [Cal PUC Workshop at 1275-76 (Seibold)]; (ii) GTE does not have "the measurements and performance on" its new gateway, called SIGS (Secure Interface Gateway System) [Cal PUC Workshop at 1275 (Seibold)]; and (iii) while it